

ABSTRACT OF THE DISCLOSURE

Sub A

~~It is an object of the invention to present a sensed-pressure-data~~
converter having a circuit for reducing a fluctuation of the output due to a
fluctuation of a resistance and a resistance changing characteristic of a
5 pressure sensitive resistance element and for reducing the output offset
and offset drift of the pressure sensitive resistance element. To achieve
the object, the converter of the invention comprises a pressure sensitive
resistance element (1), a controller (2). The controller is an electric
circuit connected to the pressure sensitive resistance element for detecting
10 the electric characteristic of the element and includes A/D converters (3, 4),
a D/A converter (6), and a memory (5). The controller compensates the
electric characteristic due to a resistance change of the pressure sensitive
resistance element and issues it from the D/A converter (6). The sensed-
pressure-data converter further comprises a temperature sensor
15 connected to the input terminal of the A/D converter in the controller, an
adjustment input terminal (7) for inputting an error between the electric
characteristic of the pressure sensitive resistance element and a reference
electric characteristic into the input terminal of the A/D converter in the
controller, which reduces the output offset and offset drift of the pressure
20 sensitive resistance element.

(19) 世界知的所有権機関
国際事務局



(43) 国際公開日
2001 年 1 月 4 日 (04.01.2001)

PCT

(10) 国際公開番号
WO 01/01095 A1

(51) 国際特許分類: G01L 1/20, 25/00

(21) 国際出願番号: PCT/JP00/04234

(22) 国際出願日: 2000 年 6 月 28 日 (28.06.2000)

(25) 国際出願の言語: 日本語

(26) 国際公開の言語: 日本語

(30) 優先権データ:
特願平 11/182854 1999 年 6 月 29 日 (29.06.1999) JP

(71) 出願人 (米国を除く全ての指定国について): 松下電器産業株式会社 (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.) [JP/JP]; 〒571-8501 大阪府門真市大字門真 1006 番地 Osaka (JP).

阪府門真市幸福町 25-21-303 Osaka (JP). 西本 進 (NISHIMOTO, Susumu) [JP/JP]; 〒632-0097 奈良県天理市中町 314 番地 Nara (JP). 栗原 功光 (KURIHARA, Norimitsu) [JP/JP]; 〒351-0104 埼玉県和光市南 1-10-63 Saitama (JP).

(74) 代理人: 弁理士 岩橋 文雄, 外 (IWAHASHI, Fumio et al.); 〒571-8501 大阪府門真市大字門真 1006 番地 松下電器産業株式会社内 Osaka (JP).

(81) 指定国 (国内): US.

(84) 指定国 (広域): ヨーロッパ特許 (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

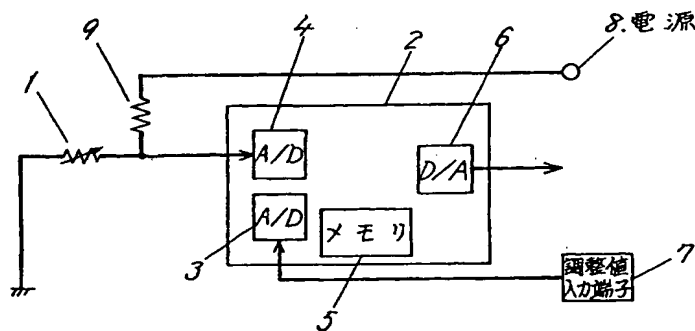
添付公開書類:
— 国際調査報告書

(72) 発明者; および
(75) 発明者/出願人 (米国についてのみ): 笹之内 清孝 (SASANOUCHI, Kiyotaka) [JP/JP]; 〒571-0066 大

2 文字コード及び他の略語については、定期発行される各 PCT ガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

(54) Title: PRESSURE-SENSITIVE TRANSDUCER

(54) 発明の名称: 感圧変換装置



5...MEMORY
8...POWER SOURCE
7...ADJUSTMENT VALUE INPUT TERMINAL

(57) Abstract: A pressure-sensitive transducer provided with a circuit for reducing the output offset and offset drift of a pressure-sensitive resistor and a circuit for reducing the variation of the resistance value of the pressure-sensitive resistor and the variation of the output caused by the variation of change characteristics of the resistance value. The transducer comprises a pressure-sensitive resistor (1), a control means (2) which is an electric circuit means adapted to measure an electrical characteristic of the pressure-sensitive resistor, connected to the pressure-sensitive resistor, including A/D converters (3,4), a D-A converter (6) and a memory (5), and adapted to correct the electrical characteristic changed by the variation in resistance value of the pressure-sensitive resistor and output the correction value from the D/A converter (6), a temperature sensor connected to an A/D input terminal of the control means, and an adjustment value input terminal (7) for inputting the error between the electrical characteristic of the pressure-sensitive resistor and the reference characteristic to an A/D input terminal of the control means. Thus the device is provided with a circuit for reducing the output offset and the offset drift of the pressure-sensitive resistor.

[続葉有]

WO 01/01095 A1